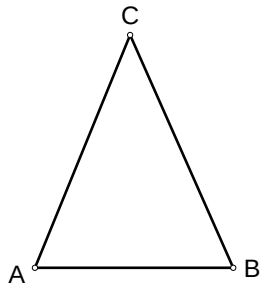
Geometry Name _____

Per. _____ Date _____

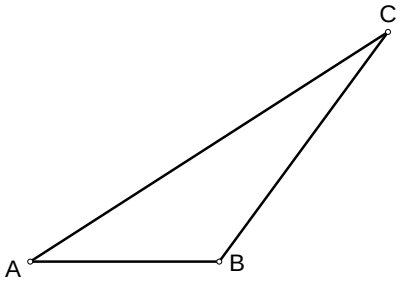
Chapter 5 Review Packet

Draw in the following for the given triangle and mark what segments/angles would be congruent or angles that would be right angles. ***You may have to put in extra points (i.e. midpoints). Targets 5A to 5E***

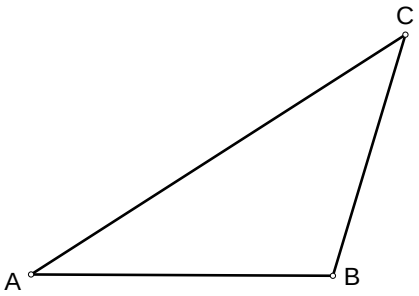
1. Median from C to AB.



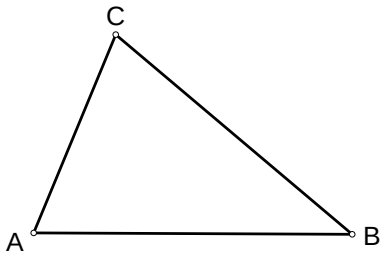
2. Altitude from C to AB.



3. Angle Bisector from B to AC.

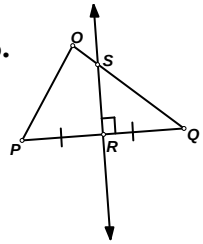


4. Perpendicular Bisector of AB.



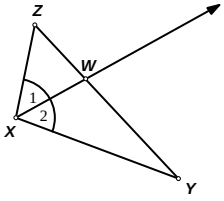
For numbers 5-8, determine whether you are given an altitude, median, angle bisector, or perpendicular bisector and then name the parts of the triangles that are either congruent or right angles. Targets 5A – 5E.

5.



_____

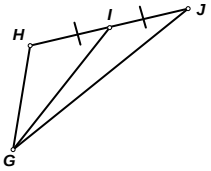
_____



_____

_____

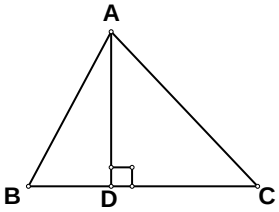
6. **7.**



_____

_____

8.



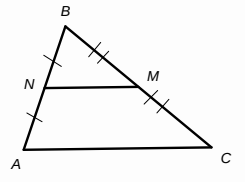
8. _____

_____

9. _____

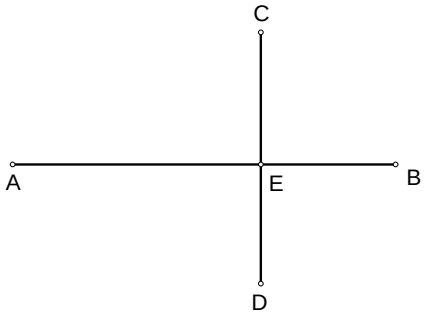
_____

9.



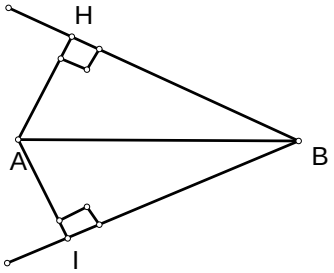
State a conclusion for the given picture.

10. $\overline{AB}$ is the perpendicular bisector of $\overline{CD}$.



_____

11. $\overrightarrow{BA}$ is the angle bisector of $\angle HBI$



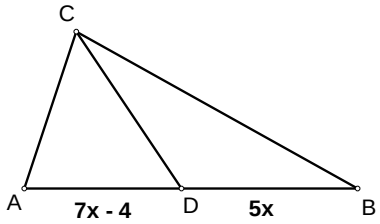
_____

12. $\overline{CD}$ is a median of ΔACB. Solve for x, AD, and AB.

x = _____

AD = _____

AB = _____

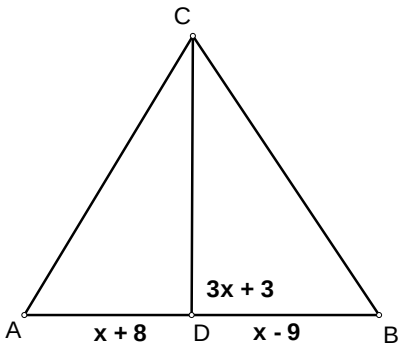


13. $\overline{CD}$ is an altitude of ΔACB. Solve for x and give the measure of AD and DB.

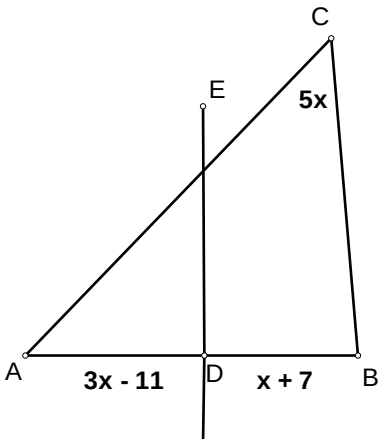
x = _____

AD = _____

DB = _____



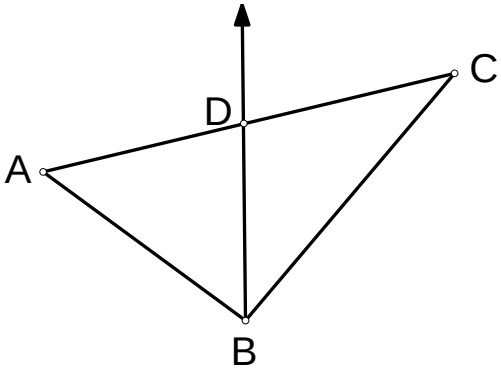
14. $\overline{EF}$ is the perpendicular bisector of AD. Solve for x and the measure of $\angle$ C.



x = _____

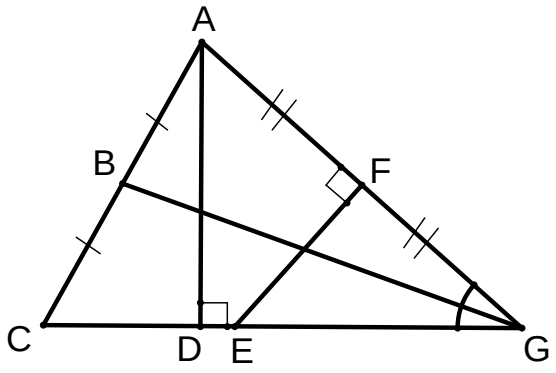
m$\angle$ C = _____

15. $\overrightarrow{BD}$ is an angle bisector of $\angle$ CBA. Solve for x if $\angle CBD = 8x$ *and* $\angle ABD = 4x + 30$.



x = _____

16. Using ΔACG at the right, give an example of the following:



Median _____

Angle bisector _____

Perpendicular bisector _____

Altitude _____

17 The point where all 3 ***perpendicular bisectors*** meet in a triangle is called the _____.

18. The point where all 3 ***angle bisectors*** meet in a triangle is called the _____.

19. The point where all 3 ***medians*** meet in a triangle is called the _____.

20. The point where all 3 ***altitudes*** meet in a triangle is called the _____.

Target 5F

21. The measure of two sides of a triangle are 12, 16. What is the range of numbers that could be the measure of the third side? Express you answer as an inequality.

_____< x < _____

Determine if the following measurements can be the sides of a triangle. If not, explain why.

22. 3 cm, 4 cm, 6 cm

Yes or No

_____

23. 2.7 in, 7.8 in, 9.3 in

Yes or No

_____

24. 14 mm, 6 mm, 8 mm

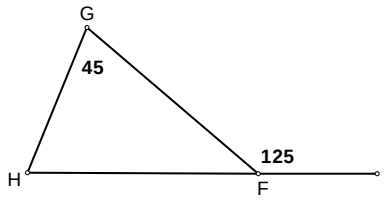
Yes or No

_____

Target 5G

Find the angles of the triangle. List the **angles** from smallest to largest. List the **sides** from smallest to largest.

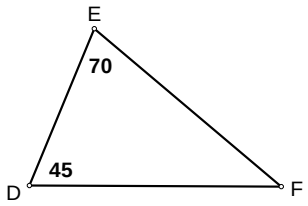
25.



Angles:_____

Sides: _____

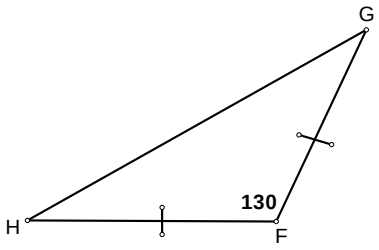
26.



Angles: _____

Sides: _____

27.

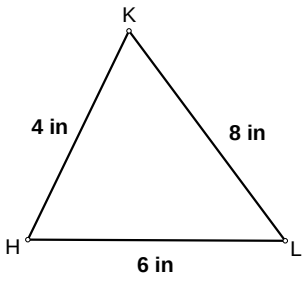


Angles:_____

Sides: _____

List the **sides** from smallest to largest. Then list the **angles** from smallest to largest.

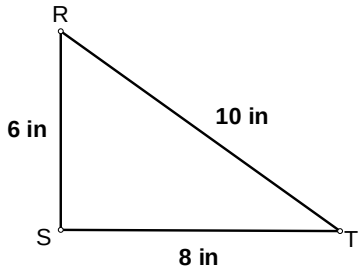
28.



Sides:_____

Angles: _____

29.



Sides:_____

Angles: _____